# TCXO3225温补晶振32MHz 1XTW32000MHB规格参数

**TCXO3225温补晶振32MHz 1XTW32000MHB规格参数介绍如下:**

**Main Electrical Characteristics主要电气参数**

- Device Name名称: TCXO3225
- Nominal Frequency标称频率: 32.000MHz
- Size尺寸: 3.2mm*2.5mm
- Model Name型号: **DSB321SDN**
- Spec. No.规格号: **1XTW32000MHB**
- Frequency Stability频率稳定度: **±0.5PPM**
- Supply Voltage额定输入电压范围: 3.3V
- Output Wave form输出波形:Clipped sine wave 削峰正弦波
- Current Consumption功耗: 2.0mA max.
- Start Up Time启动时间: 2ms
- SSB Phase Noise相噪: -130dBc/Hz

**Absolute Maximum Rating最大绝对值**

| | Item | Symbol | Rating | unit |
|---|---|---|---|---|
| 1 | Supply Voltage | $V_{CC}$ | -0.3~+4.6 | V |
| 2 | Storage Temperature Range | $T_{_STG}$ | -40~+85 | °C |

**Electrical Characteristics 电气参数特性**

| | Item | Symbol | min. | typ. | max. | unit |
|---|---|---|---|---|---|---|
| 1 | Supply Voltage | $V_{CC}$ | +3.135 | +3.30 | +3.465 | V |
| 2 | Load Impedance (resistance part) | $L_{OAD_}R$ | 9 | 10 | 11 | kΩ |
| | (parallel capacitance) | $L_{OAD_}C$ | 9 | 10 | 11 | pF |
| 3 | Operating Temperature Range | $T_{_OPR}$ | -30 | - | +85 | °C |

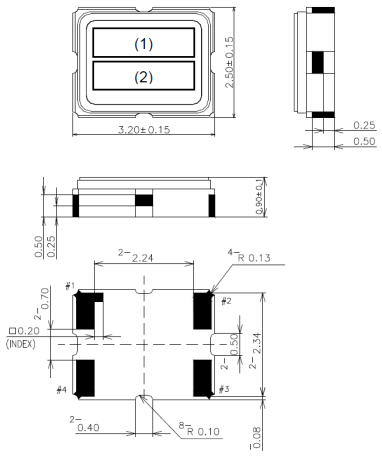
**Electrical Operating Conditions电气工作条件**

($T_A$=-30~+85°C, $L_{OAD_}$R//C=10kΩ//10pF, $V_{CC}$=+3.3V, unless otherwise noted)

| | Item | Conditions | Limits | | | unit | Notes |
|---|---|---|---|---|---|---|---|
| | | | min. | typ | max. | | |
| 1 | Current Consumption | | - | - | +2.0 | mA | |
| 2 | Output Level | | 0.8 | - | - | $V_{P-P}$ | 1 |
| 3 | Symmetry | GND level (DC cut) | 40/60 | - | 60/40 | % | |
| 4 | Harmonics | | - | - | -5 | dBc | |
| 5 | Frequency Stability<br>1.Tolerance | After 2 times reflow<br>Ref. to nominal frequency | - | - | ±1.5 | ppm | 2,3 |
| | 2.vs Temperature | $T_A$=-30~+85°C<br>Ref. to frequency ($T_A$=+25°C) | - | - | ±0.5 | ppm | |
| | 3.vs Supply Voltage | $V_{CC}$=+3.3V±5% | - | - | ±0.2 | ppm | |
| | 4.vs Load Variation | $L_{OAD_}$R//C=(10kΩ//10pF)±10% | - | - | ±0.2 | ppm | |
| | 5.vs Aging | $T_A$=Room ambient | - | - | ±1.0 | ppm/year | |
| 6 | Start Up Time | @90% of final Vout level | - | - | 2.0 | ms | |
| 7 | SSB Phase Noise | Relative to f0 level offset 1kHz | - | - | -130 | dBc/Hz | |

1. Clipped sine wave (DC-coupled)
2. Ta=+25℃
3. Please leave after reflow in 2 hours or more at room ambient.

**Outline, Pin Connections外形尺寸及脚位电路连接说明**



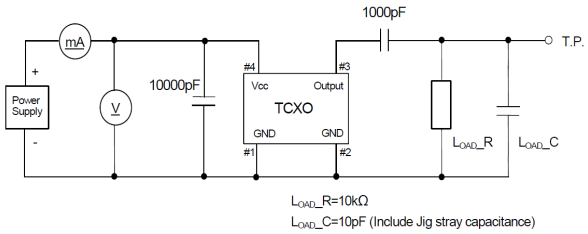

Pin Connections

| Pin No. | Connection |
|---|---|
| #1 | GND |
| #2 | GND |
| #3 | Output |
| #4 | $V_{CC}$ |

Marking
(1) Frequency 32.000 (MHz, 5digits)
(2) Date code Year (2digits) +Week (2digits)
e.g.2017/1/1 → 1701

unit: mm
Dimensional Tolerance: ±0.15
(Unless otherwise noted)

**Measurement Circuit 测试电路**




$L_{OAD}$_R=10kΩ

$L_{OAD}$_C=10pF (Include Jig stray capacitance)

**Reflow Profile 回流焊作业说明**